UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
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June 17, 2010

Ms. Suzanne B. Herron, P.E., CPESC
Director
Environmental Division
Tennessee Department of Transportation
505 Deaderick Street, Suite 900
Nashville, TN 37243

SUBJECT: Pellissippi Parkway Extension (SR162), from SR 33 (Old Knoxville Highway to US 321/SR73/Lamar Alexander Parkway, Blount County, Tennessee

Ms. Herron:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (DEIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2) (C) of the National Environmental Policy Act (NEPA). The U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA) and Tennessee Department of Transportation (TDOT) proposes to extend and construct the Pellissippi Parkway (SR 162) from the current terminus of Pellissippi Parkway/Interstate 140 at SR 33 (Old Knoxville Highway) to US 321/SR 73 (Lamar Alexander Parkway) in Blount County. The new parkway would extend the existing eastern terminus to Lamar Alexander Parkway 4.38 miles to 5.77 miles (depending on the selected alternative).

The current action was evaluated as an Environmental Assessment (EA) in January 1999. The FHWA approved the EA in October 2001 and signed the Finding of No Significant Impact (FONSI) in April 2002. In June 2002, the Citizens Against the Pellissippi Parkway Extension (CAPPE) filed suit against USDOT, FHWA and TDOT in the US District Court for the Middle District of Tennessee. CAPPE alleged that TDOT did not properly comply with NEPA and should have prepared an EIS than an EA. In July 2002, the District Court filed an injunction on planning, financing, contracting, land acquisition and construction of the project. FHWA withdrew the FONSI and sought voluntary remand to allow the agency to reconsider its decision, but the District Court denied that motion. Following an appeal by the FHWA, the District Court issued an order modifying its previous injunction in August 2004. This order allowed FHWA and TDOT to reconsider and reissue the relevant environmental documents. In September of 2004, TDOT announced its decision to begin preparation of an EIS.

The alternatives considered include one No Build Alternative and three Build Alternatives (Alternatives A, C and D). Under the No-Build Alternative, the current Pellissippi Parkway would not be extended east beyond its current terminus of SR 33. Both Build Alternatives A and C would extend Pellissippi Parkway as a new four-lane divided roadway, with interchanges at SR 33, SR 35/US411/SR35 and SR 73/US321. Alternatives A and C would share a common alignment from SR 33 to the vicinity of Brown School Road south of Wildwood Road. At this point, Alternative C would diverge to the east of Alternative A. Alternative A would be approximately 4.38 miles while Alternative C would be approximately 4.68 miles. Build Alternative D would use portions of existing roads (Sam Houston School Road, Peppermint Road, Hitch Rod and Helton Road). Under Alternative D, an improved two lane roadway would be constructed using existing roadway alignment when possible. The length of this corridor would be approximately 5.77 miles.

Based on our review of the DEIS, EPA's primary environmental concerns are related to the project purpose and need, farmland impacts, noise and mobile source air toxics (MSATs). EPA is concerned that TDOT hasn't adequately documented the purpose and need for this project especially given its contentious and controversial background and the level of impacts to the local rural, farmland nature of the community. TDOT readily admits within the DEIS, "...this analysis does not demonstrate that any of the Build Alternatives would substantially improve the level of service for the existing highway network." Additionally, the vehicle miles traveled (VMT), safety and travel time savings data all seem insufficient to support the justification for constructing the build alternatives.

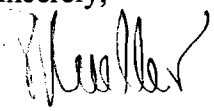
EPA is also concerned with the project's impact to the rural farming community. TDOT recognizes the cumulative impacts to the local farming community, but doesn't offer any project specific remedies to lesson these impacts. EPA recommends that TDOT identify mitigation measures to lessen impacts to the farming community and conduct an aggressive outreach effort to the farming community to solicit their input. EPA is equally concerned with the noise impacts to the community and requests that TDOT commit to provide noise abatement measures within the environmental comments section of the Executive Summary (commonly referred to as the "green pages").

The discussion of mobile source air toxics (MSATs) in the Draft EIS and in the air quality technical report presents information that is not consistent with the findings of many air quality studies. In general, air toxics impacts for highway projects should be evaluated based on emissions, dispersion modeling, and screening level risk assessment in locations where people work and reside. A discussion should be included regarding the near-roadway health impacts and the potential for such impacts during and following completion of this project. EPA recommends TDOT more thoroughly consider air toxics in their alternative analysis, quantify construction and operational emissions of MSATs, discuss dispersion emissions and exposure levels and identify appropriate avoidance, minimization, and/or mitigation opportunities.

We rate this document EC-2 (Environmental Concerns-with additional information requested for the above and below comments). Enclosed is a summary of definitions for EPA ratings and the detailed comments.

We appreciate the opportunity to review the proposed action. Please contact Jamie Higgins at (404) 562-9681 if you want to discuss our comments.

Sincerely,



Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosures

cc: Tom Love – Tennessee Department of Transportation

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION [1]

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant

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[1] From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment.

Pellissippi Parkway Extension (SR 162) From SR 33 (Old Knoxville Highway) to US 321/SR 73/Lamar Alexander Parkway, Blount County, TN

U.S. Environmental Protection Agency Detailed Comments:

NEPA Office Comments:

1. Purpose and Need: Overall, EPA is concerned regarding the purpose and need for this project. TDOT states on page 3-3 (Corridor Level of Service (LOS)), "Overall, this analysis does not demonstrate that any of the Build Alternatives would substantially improve the level of service for the existing highway network." TDOT goes on to state, "It should be noted that while the LOS ratings alone may not justify this project from a traffic flow perspective, other analyses support the need and purpose for this project, including travel time savings, reductions in crash exposure, regional linkages and system enhancements...". LOS analyses are usually the backbone of most transportation studies and EPA is concerned that the level of analyses doesn't support the stated project purpose and need. Below are specific concerns regarding the purpose and need:

a. LOS Analysis: TDOT has not conducted LOS analysis for several roads in the Maryville/Alcoa area. These roads should be better analyzed to determine the "Purpose and Need" for the project. Overall, TDOT has not provided convincing data to fulfill the project objective (Page S-2 and re-stated in Section 1.3 Purpose of the Project, page 1-6) of "Assist in achieving acceptable traffic flows (LOS) on transportation network or not adversely affect traffic flows on the existing transportation network." In fact, in the Corridor LOS section on page 3-4, TDOT states, "Overall, this analysis does not demonstrate that any of the Build Alternatives would substantially improve the level of service for the existing highway network." Below are specific concerns regarding the LOS analysis as relating to the project purpose.

1. In Table 1-1: Traffic Level of Service (2006, 2015, 2035 cont.), page 1-13, TDOT lists existing and projected LOS for various stretches of roads in the vicinity of the proposed Pellissippi Parkway. Several roads (Washington Street, US 411, E. Broadway/Old Knoxville Highway, Sam Houston School Road, Peppermint Road, Hitch Road and Helton Road) did not display projected LOS. The LOS ties back into the Purpose and Need of the project as stated on Page S-2, "Achieve acceptable traffic flows (level of service) on the local transportation network...". This data is vital in justifying the need to build Pellissippi Parkway. It seems that the proposed project would not relieve traffic volume of workday commuters traveling to their workplaces North of Maryville/Alcoa to Knoxville. EPA recommends that 1) TDOT further evaluate the Northbound weekday (toward Knoxville) commuter LOS trends to determine if the Pellissippi Parkway will in fact improve LOS along these commuter corridors and 2) EPA recommends that TDOT evaluate the traffic East/West bound traffic patterns (toward Oak Ridge National Laboratory) and 3) Compare the two analysis (East/West bound to ORNL and North/South to Knoxville) to determine if the Pellissippi Parkway will improve the existing roads LOS.

2. Looking at Figure 1-7: Existing Levels of Service, page 1-15, the poor LOS corridors (US 129/SR 115, SR 33, Sam Houston School Road, Peppermint Road, SR 35/US 411/Sevierville Rd) are North-South corridors that run through or adjacent to subdivisions. It would seem more practicable to improve these roads since these are the roads with poor LOS. What is the LOS for Old Knoxville Highway? Without LOS data for Old Knoxville Road, it is hard to determine the traffic patterns. EPA recommends TDOT evaluate the LOS for the Broadway/Old Knoxville Highway corridor to better understand traffic patterns and LOS.

3. In Figure 1-8 and Figure 1-9, page 1-15 and 1-6, the LOS for US 129/115 improves. As stated on page 1-14, "The section of Alcoa Highway between Hunt Road and Pellissippi Parkway would increase from LOS E to LOS C, likely because of Relocated Alcoa Highway". This would indicate that the higher volumes of traffic are North and South not East and West. How would the proposed Pellissippi Parkway improve the North/South roads LOS and relieve the weekday volume of traffic along the North/South corridors? Also, what is the projected LOS for all the vicinity roads with the Build Alternatives? EPA recommends that TDOT conduct similar analysis and depiction of the LOS for all the Build Alternatives to determine the traffic flow.

4. On page 3-4, Intersection LOS, TDOT's analysis states that only two intersections would benefit from the Build Alternatives (A or C). Could these intersections be improved by other less environmentally impacting and expensive improvements?

5. In comparing Figure 1-7: Existing Level of Service (page 1-16) and Figure 3-1: 2015 Build Alternatives Corridor Level of Service, it seems that there isn't much difference between the current LOS and the future Build alternatives LOS. The only LOS that would be improved is US 129/SR 115, but this LOS will most likely be improved because of the building of the Relocated Alcoa Highway or Alcoa Bypass. EPA recommends that TDOT better describe the relationship between the existing LOS, No Build Alternative and the Build Alternatives.

6. Several LOS forecasts (Washington St and E. Broadway/Old Knoxville Hwy) in Section 1-1: Traffic Level of Service (2006, 2015, 2035) (page 1-12-1-13) were not calculated. A LOS analysis along these roads is important in determining if workday commuters would utilize the proposed project if built. EPA requests TDOT forecast the LOS for these roads to better understand the traffic flow and traffic volume of the Alcoa/Maryville community.

7. In Table 1-1: Traffic Level of Service (2006, 2015 and 2035) on page 1-13, there are several roads that were not evaluated for LOS. On page 1-7, 5th paragraph, TDOT states, "Special traffic counts were conducted to determine current volumes on several two-lane local roadways in the eastern portion of the study area (Sam Houston School Road, Peppermint Road, Hitch Road, and Helton Road) since they are not part of the state-maintained system. No build volumes were forecasted to the base year and design year." It is vital that TDOT determine the LOS and volume forecasts for these roads to better compare the No Build Alternative to the Build Alternatives. EPA recommends TDOT

conduct LOS and volume forecasts for these roads especially considering Alternative D is the improvement of Sam Houston School Road.

b. Vehicle Miles Travel (VMT): In Section 1.4.1.2 Note on Recent Trends in Vehicle Miles Traveled, page 1-10, EPA disagrees with TDOT's assumption that VMT trends will increase despite data that proves otherwise. EPA recommends TDOT provide further analysis that substantiates the claim that VMT will increase. TDOT also asserts that recreational traffic near the Great Smokey Mountain National Park (GSMNP) will increase and states, "...despite the recent national decline in VMT, based on localized trends and the possibility of increased local travel to nearby vacation destinations, trip demand may well increase in and around the Maryville/Alcoa area." TDOT does statistically project an overall increase in VMT in the Region (Table 1-1); however, there is no data to substantiate their claim that VMT will increase because of recreational traffic to GSMNP.

c. Travel Between Study Area: There is good information in Section 1.4.1.1 Travel between Study Area and Knox County on page 1-10, but TDOT doesn't draw any conclusions. This discussion and Figure 1-5: Travel Volume between Knox and Blount County seem to indicate that the predominant flow of traffic is North/South along US 129 and SR 33. What are the volumes of traffic along the East/West routes toward Oak Ridge and I-40? EPA recommends TDOT better describe the conclusions from Section 1.4.1.1 and Figure 1-5. EPA would also like to see more data and discussion regarding the East/West volumes of traffic toward I-40.

d. Travel Time Savings. In Table 3-3 and Table 3-4, TDOT determines the travel time savings. Even in the best case scenario, Build Alternative A and C would only decrease travel time by 11 minutes and the worse case scenario (Alternative D) would only decrease travel time by 7 minutes. Wouldn't other less contentious and less environmentally and socially impacting alternatives accomplish the same travel time savings as the proposed Build Alternatives? EPA requests that TDOT consider and further analyze the worthiness of the proposed build alternatives.

e. Safety: TDOT states that, "Safety issues on roadways in the area, including roads in the Maryville core that through travelers between north and western portions of the county and the eastern portions of the county must pass." Safety is listed as a project purposes; however, none of the studied roadway sections have a critical crash rate ratio (A/C) that exceeds the TDOT threshold of 3.5 (reference Section 1.4.3, page 1-19). Four roadway sections have critical crash rate that exceeds 2.0. TDOT states, "...that while these routes do not have a statistical certainty of being high crash rate locations, they may still have some safety issues." How will the Build Alternatives improve these four roadway sections? Can other less environmentally impacting improvements be made to these specific roadways to improve roadway safety without building Pellissippi Parkway? EPA recommends TDOT provide further information to support the project's safety purpose and need.

3. Farmland Impacts: The Natural Resources Conservation Service (NRCS) has determined that each of the build alternatives would impact prime farmlands (page 3-40). Depending on the alternatives, 120-187 farm acres (reference Table 3-14, page 3-41) would be directly impacted. Additionally, TDOT recognizes the cumulative impacts of this project combined with other industrial and residential developments in the community and states, "Cumulative impacts on farmland could be substantial, particularly if the local growth polices are not enforced." Considering that TDOT recognizes the "substantial" cumulative impacts to farmland, EPA requests that a more thorough analyses be completed to determine these direct, indirect and cumulative impacts. Additionally, EPA requests that TDOT outreach to farmers and the NRCS to determine the least impacting alternative to farmlands. EPA also requests that farmer and NRCS input should be solicited and more thoroughly discussed in the Final EIS.

4. Noise: EPA is concerned about the noise impacts to residences. Depending on the build alternative selected, 64-110 residences will be impacted by noise and 25-86 residences will have substantial increases in noise impacts (since residences would have resultant levels elevated above the TDOT threshold of greater than 10 dBA). In the Noise Abatement section page 3-66, there is a discussion regarding the noise abatement measures. TDOT has determined that constructing of noise barriers is not feasible and states, "Final decisions regarding the construction of noise barriers will be made during final project design and following the public involvement process." EPA understands that final decisions will be made during the design phase, but we would like to be assured that noise abatement measures would be carried out. TDOT Policy 520-1 defines 'reasonableness' as "one of two criteria (also see "feasibility") used to evaluate a noise abatement measure" and that it "generally pertains to the cost effectiveness of noise abatement measures and the views/desires of the public."

Additionally, FHWA noise regulations under 23 CFR 772.11(f) requires "the views of the impacted residents will be a major consideration in reaching a decision on the reasonableness of abatement measures to be provided." EPA agrees with such public outreach; however, no analysis or discussion regarding the views of the impacted residences or general public is found in the Draft EIS. Further, 23 CFR 722.13 discusses more than just noise barriers as noise abatement measures that should be considered in the noise abatement analysis. As cited in 772.11(d), "When noise abatement measures are being considered, every reasonable effort shall be made to obtain substantial noise reductions."

Also, 722.13(d) states:

> "There may be situations where (1) severe traffic noise impacts exist or are expected, and (2) the abatement measures listed above are physically infeasible or economically unreasonable. In these instances, noise abatement measures other than those listed in 722.13(c) of this chapter may be proposed for Types I and II projects by the highway agency and approved by the Regional Federal Highway Administrator on a case-by-case basis when the conditions of 772.13(a) of this chapter have been met."

EPA recommends that TDOT commit to provide noise abatement measures (as practicable and within authorities of TDOT) within the Environmental Comments Section of the Executive Summary or commonly referred to as the "green pages".

5. Inclusion of Mitigation Measures in Environmental Commitments Section (Green Pages): TDOT has proposed several reasonable mitigation measures throughout the EIS; however, many of these mitigation measures have not been included within the Green Pages. EPA recommends that these mitigation measures be included within the Green Pages to further strengthen TDOT's commitment to lessen social and environmental impacts. Specifically, EPA requests the inclusion of the following mitigation measures within the Green Pages:

a. Farmland Impacts: On page 3-41, Section 3.6.2 Potential Mitigation Measures, TDOT states, "During design of the selected alternative, TDOT will work with farm owners to reduce the impact on farmlands as much as possible based on available design solutions." EPA recommends that TDOT describe possible mitigation measures within this section and include a farmland impact mitigation statement within the Green Pages.

b. Floodplain Impacts: On Page 3-71, Section 3.13.2 Floodplains and Hydrology, TDOT states, "Because the proposed alignments run generally perpendicular to the floodplains, avoidance of all floodplains is not possible." TDOT further describes potential mitigation measures; however, these mitigation measures have been omitted from the Green Pages. Floodplains are vital to the health of the aquatic and terrestrial ecosystem. Given the environmental importance of the floodplains to the health of the ecosystem, EPA recommends that TDOT included floodplain mitigation measures within the Green Pages.

c. In a memo dated, May 15, 2006 (Appendix A, Page A-7), the Tennessee Department of Environment and Conservation (TDEC) discusses special measures to be taken to protect sinkholes. Although TDOT has included a Karst Topography commitment statement within the Green Pages, it is unclear as to whether this will include the mitigation measures outlined in this TDEC letter. EPA requests that TDOT clarify and either include a specific environmental commitment to address sinkhole mitigation or revise the Karst Topography commitment statement to reflect sinkhole mitigation.

Water Protection Division Comments:

1. On page 2.18-19, The Public Transit, Fixed Route Local Bus Service and Bus RapidTransit Institute for Transportation Engineers (ITE) Toolbox should be evaluated with the projected population numbers that were provided earlier, 2015 & 2025.

2. On page 2.20, fixed-route public transit should be considered in conjunction with Alternative D or road improvements.

3. On page 3.15, the map is mislabeled. Alt. B should be Alt C in Figure 3.4

4. On page 3.20, the map is mislabeled. Alt. B should be Alt C in Figure 3.7. Doesn't part of the cemetery being built over essentially eliminate Alt. C from consideration??? Also in the legend, the Sam Houston Schoolhouse is not indicated on the map.

5. On page 3.70, Potential Mitigation Measures, the last sentence needs more detail regarding the design for protecting groundwater and aquatic species during and after the construction.

6. On page 3.79, Impacts to Streams, Springs, Seeps, and Other Waterbodies: 3rd paragraph, last sentence – Doesn't Alt D already cross these streams (2 in table 3.26) because of the existing roadways??? Are there any new crosses that would be created with Alt. D?

7. On Table 3.26, Wet Weather Conveyances (linear feet affected), Alt D – 1,424. This is unclear and needs clarification. Is this increase because of the old ditches along side or existing roadways affected? EPA request clarification and further discussion in the Impacts to Streams, Springs, Seeps, and Other Water Bodies section.

8. On page 3.80-81, Table 3.27 & 28 Summary of Alt A & C Impacts to Aquatic Resources, in the Potential Impacts - Types of Impacts - Entire column
Any of these that have construction activities, including culverts, would likely have sediment runoff.

9. On page 3.82 in Table 3.29 Summary of Alt D Impacts to Aquatic Resources, WWC 1 -4, Legal Designation Column, is this an existing roadside ditch? If so, wouldn't this be considered a natural aquatic resource that should be counted among the impacts?

10. On page 3.85, Measures to Avoid or Minimize to Aquatic Resources, 2nd paragraph, What specific efforts will be taken and how will they minimize the impacts? Also in the 3rd paragraph – who will periodically conduct the inspections? In the 4th paragraph, more specific details regarding the erosion and control failures and standards should be provided. In particular, the standards that will be followed for erosion and control should be included.

11. On page 3.86, 2nd paragraph, TDOT should look at the measures that would be required by alternative, the unavoidable impacts by alternative, and the effectiveness of measures by alternatives.

12. On page 3.87, Impacts to Water Quality, 1st paragraph, 1st sentence – Needs clarification since Peppermint Branch and Gravelly Creek is already crossed by the roadway that consist of what would be Alt D.

13. Continued on page 3.87, Impacts to Water Quality, 2nd paragraph – These land disturbing activities can also contribute to degradation of groundwater quality by the disturbance author and removal of the overburden that would otherwise protect the underground sources of water. This is especially the case in karst geology. The result

could be increased levels of drinking water treatment for public water supplies and private well owners in an area with grazing cattle are major concerns. The impacts on underground sources of drinking water need to be discussed and analyzed.

14. On Page 3.88, (mitigation cont'd from previous page) – there should be much more detail on the mitigation measures.

15. On page 3.98, (cont'd from previous page 3.15.7 Water Quality & Erosion Control) – Construction activities could have an impact on underground sources of drinking water. See earlier comment on pg 3.87.

16. On page 3.99, 3.16.1.1 - Indirect Effects – It is not clear if commercial developments are being considered among these bullets???

17. In the last paragraph (3.16.1.1-Indirect Effects): A project could have a small effect and resulting development a very large effect. For instance, building a road may have a very small effect, but commercial development (or even residential) that may follow (often happens) could mean a large impact that would not have occurred without the roadway. This should be acknowledged and included in the EIS study.

18. On page 3.100, 3.16.2 Methodology- Indirect Effects: This should be discussed by Alternative, especially since Alt D would be expected to have a much smaller indirect effect due to much of the roadway is already in place.

19. On page 3.112, Water Quality, 2nd sentence- at the end of the sentence .....other surface waters, **add** or groundwater in karst geology. **Also, add another sentence**, i.e., Decreased recharge of groundwater would also result from increased amounts of impervious surfaces.

20. On page 3.118, Water Quality, 2nd sentence, at the end of the sentence .....other surface waters, **add** including groundwater.

21. On page 3.120, Table 3.35 Summary of Effects, consideration of effects based upon earlier comments need to be added to this table. See above comment on page 3.87

22. On page 3.123, Table 3.35 Summary of Effects - See above comment on page 3.79
- ** Wet Weather Conveyances (linear feet affected), Alt D – 1,424 and Ponds (Acres), Alt D – 2.

23. On page 4.7, Table 4.1: Agency Responses to Initial Coordination (Cont'd), 2nd row, TDEC – Division of Water Supply (Groundwater management section, Responses on BMPs). TDOT needs to identify and discuss what BMPS will be required.

Air Toxics Assessment and Implementation Section Comments

1. Page 3-4 (Figures 3-1 and 3-2, Table 3-1) The Intersection LOS section addresses the level of service that is anticipated in 2015 and 2035. While the LOS for alternatives A and C seems to range between LOS A and LOS D for the year 2015 (the year following the anticipated opening of the road), by the design year of 2035, alternatives A and C are operating at an unacceptable LOS E ("...operations are unstable because there are virtually no gaps in the traffic stream..." page 1-12) and LOS F ("The number of vehicles entering the highway section exceeded the capacity." Page 1-12). Is there a broader plan into which this highway extension fits, such that the purpose of the proposed action (page S-2: "assist in achieving acceptable traffic flows (LOS) on the transportation network or nor adversely affect traffic flows on existing transportation network") will be realized?

2. Page 3-96 Section 3.15.3 focuses on dust suppression as a mitigation measure for air quality impacts during construction. There are many more mitigation measures that should be carried out. During construction and for the final project design, every effort should be made to avoid air quality impacts, including, but not limited to:

- A ban on open burning – all materials that would normally be burned should be recycled to the extent feasible to avoid health and visibility impacts.
- Minimizing dust and debris generated during construction.
- Construction limited to the smallest footprint feasible to avoid environmental degradation and reduce the amount of dust generated during construction.
- Maintenance of the maximum amount of trees feasible within the project right-of-way during construction to reduce footprint, noise and dust dispersion during construction.
- Installation of the latest air pollution control devices on all construction equipment (see EPA's Verified Technologies List for diesel engines at http://www.epa.gov/otaq/retrofit/verif-list.htm).
- Use of ultra low sulfur fuel exclusively for construction equipment.
- Restriction on the time that engines involved in construction may be left to idle.

3. Page 3-111 Air Quality: This section notes that the parkway extension would result in some induced residential and commercial development. This is in an area that is already experiencing rapid growth.

> Page 1-21 notes, "Since the 1970s, Blount County has been one of the fastest growing counties in the Knoxville Region (Figure 1-10). The county has experienced double-digit population growth over each 10-year Census period, and its growth rates have exceeded those of the overall Knoxville region and te state as a whole."
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> Page 3-116 notes, "Mobile Source Air Toxics (MSAT) emissions are expected to be lower than present levels by 2035 as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent from 1999 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA- projected reductions is so great ... that

MSAT emissions in the study area are likely to be lower in the future in virtually all locations regardless of whether the No-Build or Build alternatives are implemented." The February 2010 Air Quality Technical Report makes a similar argument.

Projected emission reductions resulting from EPA rules do not absolve the FHWA and the project sponsor from their responsibility to protect public health from emissions associated with this project by using appropriate mitigation measures. Furthermore, the future reductions in emissions resulting from EPA rules do not inform the decision concerning which alternative to select. The purpose of the DEIS is to compare the impacts of the alternatives being considered against one another at some point in the future, not to evaluate the impact of the EPA regulations between today and some point in the future.

4. The February 2010 Air Quality Technical Report states (page 2-21)

Under each alternative there may be localized areas where VMT would increase, and other areas where VMT would decrease. Therefore, it is possible that localized increases and decreases in MSAT emissions may occur. The localized increases in MSAT emissions would likely be most pronounced along the new roadway sections for the proposed Pellissippi Parkway between SR 33 and US 321/SR 73. There are several residential areas adjacent to this new roadway corridor, both on the east and west sides of the project area. However, even if increases do occur at these locations, they are expected to be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations.

Given that this project is likely to be built in a populated area, the potential impact of locally elevated levels of MSAT should be evaluated. The DEIS has appropriately identified several locations of sensitive populations. It would be helpful to estimate the concentrations of MSATs at these locations, to estimate the locations where higher concentrations of MSATs resulting from construction and operation of the different alternatives are likely to occur, and to identify these locations, concentrations, and potential health effects in the FEIS. Many reports published in peer reviewed journals have linked proximity to high volume traffic with health effects. This literature should also be discussed in the FEIS.

5. Pages G-1 and G-2 and the February 2010 Air Quality Technical Report state that there are technical shortcomings that prevent reliable comparisons of MSAT emissions and potential effects at the project level. Page 2-25 of the Air Quality Technical Report states, " ...available technical tools do not enable prediction of the project-specific health impacts of the emission changes associated with the detailed study alternatives." While it is correct that these tools do not predict health impacts, they do allow a comparison of potential impacts among alternatives. The thrust of the text in the report is at variance with the common practice of air quality and environmental health professionals, as reflected in the body of peer-reviewed literature employing these various models. The Pellissippi Parkway Extension appears to be a project in which there is considerable community interest. The FEIS should provide the public with a more complete analysis

of the potential impacts of air toxics associated with the construction and operation of this extension project.